

FORM PTO-1449
(REV. 7-80)

71477 U.S. PTO

ATTY. DOCKET NO.
LKS95-10SERIAL NO.
08/700INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

02/13/97

APPLICANT
P.D. Ponath, et al.

MAR 03 1997

FILING DATE
August 15, 1996GROUP
1804 1876 1644

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EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
EL	AA	5,558,864	24 September 1996	Bendig et al.	424	133.1	
EL	AB	5,225,539	6 July 1993	Winter	530	387.3	
EL	AC	5,585,089	17 December 1996	Queen et al.	424	133.1	

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
EL	AL	WO 93/02191	4 February 1993	PCT WO			
EL	AM	WO 91/09967	11 July 1991	PCT WO			

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EL	AR	Lazarovits, A.I. and Karsh J., " $\alpha 4\beta 7$ integrin in rheumatoid arthritis," In <i>Leucocyte Typing V - White Cell Differentiation Antigens</i> , S.F. Schlossman et al., eds., (Oxford: Oxford University), pp. 1686, 1687 (1995).					
EL	AS	Lazarovits, A.I., et al., "Lymphocyte Activation Antigens - I. A Monoclonal Antibody, Anti-Act I, Defines a New Late Lymphocyte Activation Antigen," <i>The Journal of Immunology</i> , 133:1857-1862 (1984).					
EL	AT	Erle, D.J., et al., "Expression and Function of the MAdCAM-1 Receptor, Integrin $\alpha 4\beta 7$, on Human Leukocytes," <i>The Journal of Immunology</i> , 153:517-528 (1994).					
EL	AU	Postigo, A.A., et al., " $\alpha 4\beta 7$ Integrin Mediates B Cell Binding to Fibronectin and Vascular Cell Adhesion Molecule-1," <i>The Journal of Immunology</i> , 151:2471-2483 (1993).					
EL	AV	Lazarovits, A.I. and Karsh, J., "Differential Expression in Rheumatoid Synovium and Synovial Fluid of $\alpha 4\beta 7$ Integrin - A Novel Receptor for Fibronectin and Vascular Cell Adhesion Molecule-1," <i>The Journal of Immunology</i> , 151:6482-6489 (1993).					
EL	AW	Schweighoffer, T., et al., "Selective Expression of Integrin $\alpha 4\beta 7$ on a Subset of Human CD4 ⁺ Memory T Cells with Hallmarks of Gut-Trophism," <i>The Journal of Immunology</i> , 151:717-729 (1993).					
EL	AX	Riechmann, L., et al., "Reshaping human antibodies for therapy," <i>Nature</i> , 332:323-327 (1988).					
EL	AY	Bendig, M.M., "Humanization of Rodent Monoclonal Antibodies by CDR Grafting," <i>METHODS: A Companion to Methods in Enzymology</i> , 8:83-93 (1995).					
EL	AZ	Page, M.J. and Sydenham, M.A., "High Level Expression of the Humanized Monoclonal Antibody Campath-1H in Chinese Hamster Ovary Cells," <i>Bio/Technology</i> , 9:64-68 (1991).					

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FORM PTO-1449
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LKS95-10SERIAL NO.
08/700,737APPLICANT
P.D. Ponath, et al.FILING DATE
August 15, 1996GROUP
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EXAM- INER INI- TIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

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gk	AR2	Bednarczyk, J.L., et al., "Identification of a Combinatorial Epitope Expressed by the Integrin $\alpha 4 \beta 1$ Heterodimer Involved in the Regulation of Cell Adhesion," <i>J. Biol. Chem.</i> , 269:8348-8354 (1994).
gk	AS2	Yacyshyn, B.R., et al., "Crohn's Disease, Ulcerative Colitis, and Normal Intestinal Lymphocytes Express Integrins in Dissimilar Patterns," <i>Gastroenterology</i> , 107:1364-1371 (1994).
gk	AT2	Pals, S.T., et al., "Expression of the Mucosal Homing Receptor $\alpha 4 \beta 7$ in Malignant Lymphomatous Polyposis of the Intestine," <i>Gastroenterology</i> , 107:1519-1523 (1994).
gk	AU2	Teague, T.K., et al., "Integrin $\alpha 4 \beta 7$ Co-Stimulation of Human Peripheral Blood T Cell Proliferation," <i>Cell Ad. Comm.</i> , 2:539-547 (1994).
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EXAMINER

Elizabeth Rabeni

DATE CONSIDERED

6/2/97

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(REV. 7-1-91)INFORMATION DISCLOSURE CITATION
1997 IN AN APPLICATION

(Use several sheets if necessary)

ATTY. DOCKET NO.-
LKS95-10SERIAL NO.
08/700,737

APPLICANTS Paul D. Ponath, et al.

FILING DATE
August 15, 1996

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EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
EL	AD	5,403,919	04-APR-95	Butcher, E.C.	530	388.22	03 MAR 93
EL	AE	4,816,567	28-MAR-89	Cabilly et al.	530	387	08 APR 83
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EL	AN	0 303 463 B1	30-11-94	EPO	-	-	
EL	AO	94/13312	23-06-94	PCT WO	-	-	
EL	AP	90/07321	12-07-90	PCT WO	-	-	
EL	AQ	95/19790	27-07-95	PCT WO	-	-	
EL	AL2	93/15764	19-08-93	PCT WO	-	-	
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EL	AY2	Berlin, C., et al., "α4 Integrins Mediate Lymphocyte Attachment and Rolling under Physiologic Flow", Cell, 80:413-422 (1995).
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EL	AR3	Hamann, A., et al., "Role of α ₄ -Integrins in Lymphocyte Homing to Mucosal Tissues In Vivo", J. of Immunology, 152:3282-3293 (1994).

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Judith Robison

DATE CONSIDERED

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APPLICANTS Paul D. Ponath, et al.

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ER	AS3	Podolsky, D.K., et al., "Attenuation of Colitis in the Cotton-top Tamarin by Anti- α 4 Integrin Monoclonal Antibody", J. Clin. Invest., 92:372-380 (1993).
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ER	AU3	Podolsky, D.K., "Inflammatory Bowel Disease (Second of Two Parts)", The New England J. of Med., 325(14):1008-1016 (1991).
ER	AV3	Springer, T.A., "The Sensation and Regulation of Interactions with the Extracellular Environment: The Cell Biology of Lymphocyte Adhesion Receptors", Annu. Rev. Cell Biol., 6:359-402 (1990).
ER	AW3	Picker, L.J. and Butcher, E.C., "Physiological and Molecular Mechanisms of Lymphocyte Homing", Annu. Rev. Immunol., 10:561-591 (1992).
ER	AX3	Hynes, R.O., "Integrins: Versatility, Modulation, and Signaling in Cell Adhesion", Cell, 69:11-25 (1992).
ER	AY3	Berlin, C., et al., " α 4 β 7 Integrin Mediates Lymphocyte Binding to the Mucosal Vascular Addressin MADCAM-1", Cell, 74:185-195 (1993).
ER	AZ3	Springer, T.A., "Traffic Signals for Lymphocyte Recirculation and Leukocyte Emigration: The Multistep Paradigm", Cell, 76:301-314 (1994).
ER	AR4	Briskin, M.J., et al., "MADCAM-1 Has Homology to Immunoglobulin and Mucin-Like Adhesion Receptors and to IgA1", Nature, 363:461-463 (1993).
ER	AS4	Salmi, M., et al., "Aberrant Binding of Lamina Propria Lymphocytes to Vascular Endothelium in Inflammatory Bowel Diseases", Gastroenterology, 106:596-605 (1994).

EXAMINER

Evelyn Rabin

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FORM PTO-1449
(REV. 7-80)INFORMATION DISCLOSURE CITATION
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LKS95-10SERIAL NO.
08/700-737

APPLICANTS Paul D. Ponath, et al.

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August 15, 1996

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gr	AT4	Silber, A., et al., "Recruitment of Lymphocytes during Cutaneous Delayed Hypersensitivity in Nonhuman Primates is Dependent on E-Selectin and Vascular Cell Adhesion Molecule 1", <i>J. Clin. Invest.</i> , 93:1554-1563 (1994).
gr	AU4	Salmi, M., et al., "Dual Binding Capacity of Mucosal Immunoblasts to Mucosal and Synovial Endothelium in Humans: Dissection of the Molecular Mechanisms", <i>J. Exp. Med.</i> , 181:137-149 (1995).
gr	AV4	Andrew, D.P. et al., "Distinct but Overlapping Epitopes Are Involved in $\alpha_4\beta_7$ -Mediated Adhesion to Vascular Cell Adhesion Molecule-1, Mucosal Addressin-1, Fibronectin, and Lymphocyte Aggregation", <i>J. of Immunology</i> , 153:3847-3861 (1994).
gr	AW4	Osband, M.E. and Ross, Susan, "Problems in the Investigational Study and Clinical Use of Cancer Immunotherapy", <i>Immunol. Today</i> , 11(6):103-105 (1990).
gr	AX4	Waldmann, T.A., "Monoclonal Antibodies in Diagnosis and Therapy", <i>Science</i> , 252:1657-1662 (1991).
gr	AY4	Harris, W.J. and Emery, S., "Therapeutic Antibodies-The Coming of Age", <i>TIBTECH</i> , 11:42-44 (1993).

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Evelyn Rabeni

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(REV. 7-80)INFORMATION DISCLOSURE CITATION
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ATTY. DOCKET NO.
LKS95-10SERIAL NO.
08/700,737APPLICANTS Paul D. Ponath, Douglas J.
Ringler, S. Tarran Jones, Walter Newman,
José Saldanha and Mary M. **RECEIVED**FILING DATE
August 15, 1996GROUP
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U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
135	ER	AN2	WO 94/17828	18-AUG-94	PCT	—	
	ER	AO2	WO 97/18838	29-MAY-97	PCT	—	
	ER	AP2	JP 63 03990	01-NOV-94	Japan	—	X

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MS	ER	AZ4	Kettleborough, C.A., et al., "Humanization of a Mouse Monoclonal Antibody by CDR-grafting: The Importance of Framework Residues on Loop Conformation", Protein Engng., 4(7):773-783 (1991).				
MS	ER	AR5	Briskin, M.J., et al., "Structural Requirements for Mucosal Vascular Addressin Binding to Its Lymphocyte Receptor $\alpha 4\beta 7$ ", J. Immunol., 156:719-726 (1996).				

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Eden Rabin

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Sheet 1 of 1

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APPLICATION NO.
08/700,737

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INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

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ATTORNEY DOCKET NO.
LKS95-10APPLICANTS
Paul D. Ponath, Douglas J. Ringler, S. Tarran
Jones, Walter Newman, José Saldanha and Mary
M. BendigFILING DATE
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U.S. PATENT DOCUMENTS

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EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
AI		5,888,507	30-MAR-99	Burkly	424	130.1	22-MAY-95

FOREIGN PATENT DOCUMENTS

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08/700,737INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

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Paul D. Ponath et al.

FILING DATE

August 15, 1996

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1644

PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
<i>M</i>	AG	5,840,299	24-Nov-98	Bendig, et al.	424	133.1	21-Nov-95
<i>N</i>	AH	5,871,734	16-Feb-99	Lobb, et al.	424	144.1	21-Mar-97

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES	NO
	AL							
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1855.1017-000
(LKS95-10)APPLICATION NO.
08/700,737INFORMATION DISCLOSURE CITATION
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January 18, 2000

(Use several sheets if necessary)

APPLICANT

Paul D. Ponath, Douglas J. Ringler, S.
Tarran Jones, Walter Newman, José Saldanha
and Mary M. BendigFILING DATE
August 15, 1996GROUP
1644

U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
ms	AJ	5,932,214	03-AUG-99	Lobb et al.	424	144.1	
	AK	4,816,397	28-MAR-89	Boss et al.	435	68	
	AA2	5,693,761	02-DEC-97	Queen et al.	536	23.53	
	AB2	5,693,762	02-DEC-97	Queen et al.	530	387.3	
	AC2	5,859,205	12-JAN-99	Adair et al.	530	387.3	
	AD2	5,821,337	13-OCT-98	Carter et al.	530	387.3	
	AE2	5,624,821	29-APR-97	Winter et al.	435	69.6	
	AF2	5,648,260	15-JUL-97	Winter et al.	435	252.3	
	AG2						
	AH2						
	AI2						

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ms	AQ2	WO 90/07861	26-JUL-90	PCT WO			
	AL3	WO 88/07089	22-SEP-88	PCT WO			
	AM3	WO 94/29351	22-DEC-94	PCT W			

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ms	AS5	Yuan, Q., et al., "Cloning and Sequence Analysis of a Novel β_2 -related Integrin Transcript from T Lymphocytes: Homology of Integrin Cysteine-rich Repeats to Domain III of Laminin B Chains", Int'l. Immunol., 2(11):1097-1108 (1990).
m	ATS	Yuan, Q. et al., Corrigenda, "Cloning and Sequence Analysis of a Novel β_2 -related Integrin Transcript from T Lymphocytes: Homology of Integrin Cysteine-rich Repeats to Domain III of Laminin B Chains", Int'l. Immunol., 3(12):1373-1374 (1991).

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